



HEAT & SMOKE DETECTORS – CONVENTIONAL ORBIS DETECTORS

DESCRIPTION

Orbis has been designed to make installation, commissioning and maintenance fast and simple. Orbis detectors have StartUp™, a phase that uses a flashing red LED to confirm that the devices are wired in the correct polarity. Normal operation is resumed automatically after four minutes.

A one-second reset switches from normal operation to FasTest®, allowing functional testing with smoke or heat to be done in just four seconds.

ORBIS OPTICAL SMOKE DETECTOR



The Orbis optical smoke detector's sensing technology makes it significantly different in design from existing optical detectors. Although the Orbis optical detector operates on the well-established light scatter principle, it has a new optical system that reduces false alarms while still meeting international detection standards. The stability of the detector is further increased by the incorporation of drift compensation and the use of internal software to decide when the detector should change to the alarm state. This greatly reduces the likelihood of a detector producing an alarm as a result of smoke from a non-fire source.

ORBIS MULTI-SENSOR SMOKE DETECTOR



The multi-sensor smoke detector benefits from the same false alarm reduction technology as the optical detector. It is a thermally enhanced smoke detector that is a development of the optical detector and goes even further in its capabilities of fire detection. The optical sensor is influenced by the heat sensing element, making the detector more responsive to fast-burning, flaming fires. It should be used as the detector of choice in areas of high risk with heat at an early stage of the conflagration and with increased likelihood of unwanted alarms.

ORBIS HEAT DETECTOR



Orbis heat detectors are suitable in atmospheres with high dust content or where fumes may temporarily be concentrated, such as vehicle loading bays. There are seven heat detectors to suit a wide variety of operating conditions. Static heat detectors respond only when a fixed temperature has been reached. Rate-of-rise detectors have a fixed upper limit too, but they also measure the rate of increase in temperature.

KEY FEATURES

- TimeSaver Base® designed for fast installation
- StartUp™ for fast commissioning
- FasTest® reduces maintenance time
- Wide voltage and operating temperature ranges
- Optical sensor designed for high reliability and reduced false alarm incidence
- Multi-sensor smoke detector for detecting fast-burning fires
- Flashing LED option

APPROVALS

- EN 54-7: 2000 + A1: 2002
 - Optical smoke detector
- EN 54-7: 2000 + A1: 2002 & CEA 4021: 2003-07
 - Multi-sensor smoke detector
- EN 54-5: 2000 + A1: 2002
 - Heat detector
- Orbis detectors have been declared as being compliant with the essential requirements of the EMC Directive 2004/108/EEC and the Construction Products Directive 89/106/EEC.





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TIMESAVER BASE®



The TimeSaver Base® is a completely new design that provides installers with an open working area with fixing holes shaped to allow a simple mounting procedure. The terminals are grouped to make it easier to wire. Features include two fixing centres, an LED alignment mark, a guide to indicate the length of cable to be stripped, and a continuity link for voltage testing of zone wiring prior to commissioning. All bases have a mechanism for locking detectors if required. Also available is a diode base for use in systems which continue to operate even if one or more detectors have been removed without authorisation; a relay base and a Sav-wire base.

Orbis is a modern, stylish detector range packed with practical features that make installation, commissioning and maintenance easy and efficient, and new sensing and operating technologies that improve reliability and detection.

The Orbis range comprises an optical smoke detector, a multi-sensor smoke detector, heat detectors and a choice of bases.

OTHER FEATURES

- TimeSaver Base® is a completely new design that provides installers with an open working area and single quadrant terminals.
- StartUp™ uses a flashing red LED to confirm that the devices are wired in the correct polarity.
- Continuity Link enables voltage testing of zone wiring prior to commissioning.
- Wide Angle Optics respond well to a wide range of fires.
- DustDefy™ system prevents dust ingress while maintaining airflow.
- Transient Rejection uses algorithms to filter out temporary abnormal readings, helping to reduce false alarms.
- Drift Compensation maintains calibrated sensitivity levels even if the detector is contaminated.
- E-Z Fit Slots allow base to be fixed in position without removing mounting screws, using a simple sliding action.
- 360° Visibility of LEDs.

ORDERING INFORMATION

Product Code	Product Description
AP-ORB-H	Orbis ROR Heat Detector with Flashing LED; Class A1/R (65°C)
AP-ORB-HA1S	Orbis Fixed Temperature Heat Detector; Class A1/S (65°C)
AP-ORB-MS	Orbis Multi-sensor Detector with Flashing LED
AP-ORB-O	Orbis Optical Smoke Detector with Flashing LED
AP-ORB-B	Orbis Detector Base
AP-ORB-BHT	Orbis Heated Base
AP-ORB-RB	Orbis Detector Relay Base

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